

Watershed Evaluations

03050109-010

(North Saluda River)

General Description

Watershed 03050109-010 is located in Greenville County and consists primarily of the **North Saluda River** and its tributaries. The watershed occupies 48,423 acres of the Blue Ridge and Piedmont regions of South Carolina. The predominant soil types consist of an association of the Ashe-Cecil series. The erodibility of the soil (K) averages 0.25 and the slope of the terrain averages 25%, with a range of 2-65%. Land use/land cover in the watershed includes: 89.2% forested land, 5.6% agricultural land, 3.0% urban land, 2.1% water, and 0.1% forested wetland (swamp).

The North Saluda River originates near the State boundary with North Carolina and flows through Poinsett Reservoir, which is also known as the North Saluda Reservoir. Tributaries of Poinsett Reservoir include: Brice Creek, Brushy Creek, Big Falls Creek (Falls Creek, Posey Creek, Guest Creek), and Little Falls Creek. The portion of the North Saluda River from its headwaters to and including Poinsett Reservoir (drinking water reservoir for the City of Greenville) and its tributaries are classified ORW. The North Saluda River flows out of Poinsett Reservoir and accepts drainage from Calahan Branch, Beaverdam Creek (Terry Creek, Short Branch), Sprigg Creek, Bull Creek, and Talley Creek. Another Beaverdam Creek enters the river near the Town of Marietta as does Whitmire Creek. The river and its tributaries downstream of Poinsett Reservoir are classified FW. There are a total of 93.6 stream miles and 1,108.7 acres of lake waters in this watershed. Pleasant Ridge State Park is located in this watershed.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-292	P/W	ORW	POINSETT RESERVOIR AT WATER INTAKE
S-088	P/W	FW/ORW	NORTH SALUDA RIVER AT S-23-42, 5.2 MI NNW OF TIGERVILLE
S-773	BIO	FW	NORTH SALUDA RIVER AT U.S. ROUTE 25
S-004	S/INT/BIO	FW	NORTH SALUDA RIVER AT S-23-89

North Saluda Reservoir or Poinsett Reservoir (S-292) - Aquatic life uses are fully supported. There is a significant increasing trend in pH. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

North Saluda River - There are three SCDHEC monitoring stations along the North Saluda River. At the upstream site (**S-088**), aquatic life uses are fully supported; however, there is a significant decreasing trend in dissolved oxygen. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus suggests improving conditions for this parameter. P,P'DDE, a metabolite of DDT, was detected in the 1997 and 1999 sediment samples, and P,P'DDT and P,P'DDD were detected in the 1999 sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. A high

concentration of zinc was measured in the 1999 sediment sample. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Aquatic life uses are not supported at the midstream site (*S-773*) based on macroinvertebrate community data. At the downstream site (*S-004*), aquatic life uses are partially supported based on macroinvertebrate community data. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. There is a significant increasing trend in pH. Recreational uses are not supported due to fecal coliform bacteria excursions.

Natural Swimming Areas

<i>FACILITY NAME</i>	<i>PERMIT #</i>
<i>RECEIVING STREAM</i>	<i>STATUS</i>
PLEASANT RIDGE COUNTY PARK	23-N13
NORTH SALUDA RIVER TRIBUTARY	ACTIVE
CAMP OLD INDIAN	23-N08
CALAHAN BRANCH	ACTIVE

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM</i>	<i>NPDES#</i>
<i>FACILITY NAME</i>	<i>TYPE</i>
<i>PERMITTED FLOW @ PIPE (MGD)</i>	<i>COMMENT</i>
NORTH SALUDA RIVER	SCG250012
JPS CONVERTER & INDUSTRIES	MINOR INDUSTRIAL
PIPES #: B10 FLOW: 0.20	
NORTH SALUDA RIVER	SC0026883
WCRSA/SLATER/MARIETTA	MINOR DOMESTIC
PIPE #: 001 FLOW: 0.672	

Water Quantity

<i>WATER USER</i>	<i>REGULATED CAPACITY (MGD)</i>
<i>WATERBODY</i>	<i>PUMPING CAPACITY (MGD)</i>
GREENVILLE WATER SYSTEM	60.0
NORTH SALUDA RESERVOIR	90.0

Growth Potential

There is a low potential for development within this mountainous watershed, which contains a portion of the Town of Slater-Marietta. A portion of the watershed is protected by the City of Greenville and the Nature Conservancy as the Greenville Water Commission Watershed.